

ABSTRACT OF THE DISCLOSURE

5 A photovoltaic element, a light shielding portion,  
a planarized layer, a color filter, another planarized  
layer and an undercoat layer are formed successively on  
a semiconductor substrate, followed by forming resin  
lenses. The undercoat layer positioned between  
adjacent resin lenses is subjected to an etching  
treatment with the resin lenses used as a resist mask  
so as to form ditches extending in the X- and Y-  
10 directions and other ditches extending in the XY-  
direction. Further, a transparent resin layer having a  
predetermined thickness is formed to cover the resin  
lenses and the ditches, thereby obtaining a solid  
image-pickup device comprising a micro lens array  
15 including a plurality of micro lenses.